

WHAT IS CLAIMED IS:

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1 A DSL communication method for  
interconnecting a user and a center by using a 2-  
wire telephone line and a DSL communications  
technology so that said user and said center perform  
10 an intercommunication, the method comprising the  
steps of:

monitoring a signal-to-noise ratio of an  
accepted DSL;

15 { judging whether or not said signal-to-  
noise ratio is within a predetermined range; and

interrupting said intercommunication once  
and thereafter reconnecting said user and said  
center, when said signal-to-noise ratio is judged  
not to be within said predetermined range for a  
20 duration longer than a reference time.

25 2. The DSL communication method as  
claimed in claim 1, further comprising the step of  
arbitrarily setting an upper limit and a lower limit  
defining said predetermine range.

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3. The DSL communication method as  
claimed in claim 1, further comprising the reference  
35 time setting step of arbitrarily setting said  
reference time.

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4. The DSL communication method as claimed in claim 2, further comprising the reference time setting step of arbitrarily setting said reference time.

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5. The DSL communication method as claimed in claim 3, wherein said reference time setting step sets a first reference time to be compared with a duration during which said signal-to-noise ratio is higher than an upper limit of said predetermined range, and sets a second reference time to be compared with a duration during which said signal-to-noise ratio is lower than an lower limit of said predetermined range, the first reference time being identical to the second reference time.

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6. The DSL communication method as claimed in claim 4, wherein said reference time setting step sets a first reference time to be compared with a duration during which said signal-to-noise ratio is higher than said upper limit, and sets a second reference time to be compared with a duration during which said signal-to-noise ratio is lower than said lower limit, the first reference time being identical to the second reference time.

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7. The DSL communication method as

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claimed in claim 3, wherein said reference time  
setting step sets a first reference time to be  
compared with a duration during which said signal-  
to-noise ratio is higher than an upper limit of said  
5 predetermined range, and sets a second reference  
time to be compared with a duration during which  
said signal-to-noise ratio is lower than an lower  
limit of said predetermined range, the first  
reference time being different from the second  
10 reference time.

15 8. The DSL communication method as  
claimed in claim 4, wherein said reference time  
setting step sets a first reference time to be  
compared with a duration during which said signal-  
to-noise ratio is higher than said upper limit, and  
20 sets a second reference time to be compared with a  
duration during which said signal-to-noise ratio is  
lower than said lower limit, the first reference  
time being different from the second reference time.

25 9. A DSL communication device comprising:  
a DSL-interface containing unit  
30 interconnecting a user and a center by using a 2-  
wire telephone line and a DSL communications  
technology so as to perform an intercommunication  
therebetween;  
a line-quality monitoring unit monitoring  
35 a signal-to-noise ratio of an accepted DSL;  
a line-quality judging unit judging  
whether or not said signal-to-noise ratio is within

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a predetermined range; and

a controlling unit causing said DSL-  
interface containing unit to interrupt said  
intercommunication once and to reconnect said user  
5 and said center thereafter, when said signal-to-  
noise ratio is judged not to be within said  
predetermined range for a duration longer than a  
reference time.

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10. The DSL communication device as  
claimed in claim 9, further comprising a range  
15 setting unit arbitrarily setting an upper limit and  
a lower limit of said predetermine range.

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11. The DSL communication device as  
claimed in claim 9, further comprising a reference  
time setting unit arbitrarily setting said reference  
time.

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12. The DSL communication device as  
30 claimed in claim 10, further comprising a reference  
time setting unit arbitrarily setting said reference  
time.

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13. The DSL communication device as

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claimed in claim 11, wherein said reference time  
setting unit sets a first reference time to be  
compared with a duration during which said signal-  
to-noise ratio is higher than an upper limit of said  
5 predetermined range, and sets a second reference  
time to be compared with a duration during which  
said signal-to-noise ratio is lower than an lower  
limit of said predetermined range, the first  
reference time being identical to the second  
10 reference time.

14. The DSL communication device as  
claimed in claim 12, wherein said reference time  
setting unit sets a first reference time to be  
compared with a duration during which said signal-  
to-noise ratio is higher than said upper limit, and  
20 sets a second reference time to be compared with a  
duration during which said signal-to-noise ratio is  
lower than said lower limit, the first reference  
time being identical to the second reference time.

15. The DSL communication device as  
claimed in claim 11, wherein said reference time  
30 setting unit sets a first reference time to be  
compared with a duration during which said signal-  
to-noise ratio is higher than an upper limit of said  
predetermined range, and sets a second reference  
time to be compared with a duration during which  
35 said signal-to-noise ratio is lower than an lower  
limit of said predetermined range, the first  
reference time being different from the second

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reference time.

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16. The DSL communication device as  
claimed in claim 12, wherein said reference time  
setting unit sets a first reference time to be  
compared with a duration during which said signal-  
to-noise ratio is higher than said upper limit, and  
sets a second reference time to be compared with a  
duration during which said signal-to-noise ratio is  
lower than said lower limit, the first reference  
time being different from the second reference time.

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